

## University of Puerto Rico at Mayaguez QuarkNet Center 2012 Activity Report

9/7/12

The University of Puerto Rico at Mayaguez (UPRM) QuarkNet Center consists of around 22 teachers from all around the island of Puerto Rico. In the period from September 1, 2011 to August 31, 2012, the UPRM QuarkNet Center has held 3 workshops, including center participation in the masterclass (March 2012).



*Teacher Elba Sepulveda (center) and mentor Hector Mendez (left of center) with students at CROEM in Mayaguez.*

### Masterclass 2012

The group had a successful masterclass with around 30 students and teachers working on the CMS W/Z measurement. The Mayaguez masterclass connected by videoconference with groups from Indiana, Brazil, and New Zealand, making for an exciting experience.

### Workshops

The UPRM center has had 2 workshops in addition to the masterclass. The first was held October 22-23, 2011; it was dedicated the CMS e-Lab with Dr. Thomas Loughran coming from Notre Dame to facilitate. The other workshop was on January 28, 2012 and was focused on CMS data analysis and preparation for the Masterclass.

### Cosmic Ray Detectors

The UPRM center currently has 2 detectors. One is at CROEM (an island-wide magnet high school) in Mayaguez; the second has been recently moved to Ponce High School.

### Teacher Research Experiences

UPRM QuarkNet teachers Elba Sepulveda and Daniel Gutierrez had TRAC research appointments in summer 2012 at Fermilab: Elba worked on the dark energy search and Daniel was assigned to a neutrino experiment.